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EXAMINER

HERNANDEZ, NELSON D

ART UNIT

PAPER NUMBER

2612

DATE MAILED: 06/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/028,895

Applicant(s)

SASAKI ET AL.

Examiner

Nelson D. Hernandez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Examiner acknowledges the amendments made on the claims. Claims 1, 15 and 18 have been amended to include limitations of claim 10 and claim 10 has been cancelled.

Response to Arguments

2. Applicant's arguments, see page 6, lines 17-31, filed January 1, 2005, with respect to claim 1, 15 and 18 including limitations of claim 10 have been fully considered and are persuasive. The previous rejection of claims 1, 15 and 18 has been withdrawn.
3. Applicant's arguments, see page 6, lines 17-31, filed January 21, 2005, with respect to the rejection(s) of claim(s) 1, 15 and 18 including limitations of claim 10 under 35 USC § 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. **Claims 1-5, 7, 11-16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moronaga, US Patent 5,956,084 in view of Misawa, US Patent 6,208,380 B1.**

Regarding claim 1, Moronaga discloses a digital camera (Figs. 2 and 7) for providing digital images of optical images, the camera comprising; an intermediate memory (Fig. 7: 213) for storing said digital images; a display (Fig. 7: 218) for providing a visual display of said digital images stored in said intermediate memory; long-term image memory (Fig. 7: 231) for storing a plurality of digital images; and a controller (CPU shown in fig. 1: 44 uses controller shown in fig. 9 to select images from said intermediate memory) for selecting digital images from said intermediate memory and storing said selected digital images in said long-term image memory (Col. 10, line 52 – col. 20, line 67; col. 21, lines 30-59; col. 22, lines 28-67; col. 23, lines 1-8) but does not explicitly disclose that the controller initiates processing to prepare for removing said long-term image memory from said digital camera including transfer of said digital image from said intermediate memory into said long-term image memory.

However, Misawa teaches a camera (See fig. 1: 10), comprising a control unit (fig. 4: 46) that controls the operations of the camera including the transfer of image data between the built-in memory (Fig. 4: 42) and a memory card (Fig. 1: 12), wherein said controller upon detection of the memory card, selects the images stored in the built-in memory and transfers them to the memory card by using a card connector interface (Fig. 4: 16), after storing the images from the built-in memory to the memory card, said control unit deletes the images stored in the built-in memory in order to allow

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capturing more images (Col. 2, lines 6-67; col. 3, lines 6-67; col. 4, line 12 – col. 5, line 11).

Therefore, taking the combined teaching of Moronaga in view of Mizawa as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Moronaga by having the controller to automatically transferring the images stored in the intermediate memory to the long-term image memory upon detecting that the intermediate memory is full and upon detecting the presence of the long-term memory. The motivation to do so would have been to free space in the intermediate memory to allow the camera to capture more images to be stored in said intermediate memory as suggested by Mizawa (See col.4, line 4, lines 12-36).

Regarding claim 2, Moronaga discloses that the controller further comprises a manual input device for providing user selection of said digital images that are to be stored in said long-term image memory from the intermediate memory (Col. 21, lines 30-59; col. 22, lines 28-67; col. 23, lines 1-8).

Regarding claim 3, Moronaga discloses that the long-term image memory comprises a removable consumable digital media (Col. 20, lines 11-21; col. 24, lines 13-18).

Regarding claim 4, this claims is written in a Moronaga discloses that the intermediate memory is organized to provide selective transfer of images to the long-term image memory or both (Col. 21, lines 30-59; col. 22, lines 28-67; col. 23, lines 1-8).

Regarding claim 5, Moronaga discloses that the controller automatically stores one or more intermediate memory digital images in said long-term image memory in response to a capture of a subsequent digital image when it is determined that room needs to be created in said intermediate memory to store the subsequent digital image (Col. 12, line 57- col. 13, line 22).

Regarding claim 7, Moronaga discloses that the intermediate memory stores a plurality of digital images and said controller is configured to select ones of said digital images in said intermediate memory for long-term storage in said long-term image memory, and wherein storage space in said intermediate memory that was previously occupied by said selected ones of said digital images is made available for the storage of subsequent captured digital images (Col. 22, lines 28-67; col. 23, lines 1-8).

Regarding claim 11, Moronaga discloses that the controller is selectively operable to transfer a digital image from said intermediate memory to said long-term image memory (Col. 21, lines 53-56; col. 22, lines 28-67; col. 23, lines 1-8) or to a communications port providing connectivity with remote external memory (See fig. 5) or to both.

Regarding claim 12, Moronaga discloses that the a sensor (Figs. 1: 46 and 10: 241; col. 10, lines 20-31; col. 23, lines 37-43) for detecting an attempt to remove said long-term image memory from said digital camera; and means for processing a digital image stored in said intermediate memory to indefinitely retain said image in said intermediate memory (Col. 23, lines 16-25).

Regarding claim 13, Moronaga discloses that the long-term image memory is a replaceable memory module (Memory card in fig. 7: 230; col. 20, lines 11-21).

Regarding claim 14, Moronaga discloses that the replaceable memory module comprises a consumable digital medium (Col. 20, lines 11-21; col. 24, lines 13-18).

Regarding claim 15, Moronaga discloses a method of processing a digital image, comprising: storing said digital image in an intermediate memory (Fig. 7: 213); displaying a visual image (Fig. 7: 218) of said digital image in said intermediate memory; and selectively (CPU shown in fig. 1: 44 uses controller shown in fig. 9 to select images from said intermediate memory) storing said digital image to a long-term image memory (Fig. 7: 231) from said intermediate memory (Col. 10, line 52 – col. 20, line 67; col. 21, lines 30-59; col. 22, lines 28-67; col. 23, lines 1-8) but does not explicitly disclose that the controller initiates processing to prepare for removing said long-term image memory from said digital camera including transfer of said digital image from said intermediate memory into said long-term image memory.

However, Misawa teaches a camera (See fig. 1: 10), comprising a control unit (fig. 4: 46) that controls the operations of the camera including the transfer of image data between the built-in memory (Fig. 4: 42) and a memory card (Fig. 1: 12), wherein said controller upon detection of the memory card, selects the images stored in the built-in memory and transfers them to the memory card by using a card connector interface (Fig. 4: 16), after storing the images from the built-in memory to the memory card, said control unit deletes the images stored in the built-in memory in order to allow

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capturing more images (Col. 2, lines 6-67; col. 3, lines 6-67; col. 4, line 12 – col. 5, line 11).

Therefore, taking the combined teaching of Moronaga in view of Mizawa as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Moronaga by having the controller to automatically transferring the images stored in the intermediate memory to the long-term image memory upon detecting that the intermediate memory is full and upon detecting the presence of the long-term memory. The motivation to do so would have been to free space in the intermediate memory to allow the camera to capture more images to be stored in said intermediate memory as suggested by Mizawa (See col.4, line 4, lines 12-36).

Regarding claim 16, Moronaga discloses compressing said digital image in said intermediate memory prior to selectively storing said digital image to said long-term image memory (Col. 23, lines 16-25).

Regarding claim 18, Moronaga discloses digital image capture system (Figs. 2 and 7) comprising: sensor means (Fig. 7: 202) for providing a digital image of an optical image; first storage means (Fig. 7: 213) for storing said digital image; display means (Fig. 7: 218) for providing a visual display of said digital image in said first storage means; second storage means (Fig. 7: 231) for storing a plurality of digital images; and control means (See fig. 9) for selecting digital images in said first storage means for storage in said second storage means (Col. 10, line 52 – col. 20, line 67; col. 21, lines 30-59; col. 22, lines 28-67; col. 23, lines 1-8) but does not explicitly disclose that the

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control means processing to prepare for removing said long-term image memory from said digital camera including transfer of said digital image from said intermediate memory into said long-term image memory.

However, Misawa teaches a camera (See fig. 1: 10), comprising a control unit (fig. 4: 46) that controls the operations of the camera including the transfer of image data between the built-in memory (Fig. 4: 42) and a memory card (Fig. 1: 12), wherein said controller upon detection of the memory card, selects the images stored in the built-in memory and transfers them to the memory card by using a card connector interface (Fig. 4: 16), after storing the images from the built-in memory to the memory card, said control unit deletes the images stored in the built-in memory in order to allow capturing more images (Col. 2, lines 6-67; col. 3, lines 6-67; col. 4, line 12 – col. 5, line 11).

Therefore, taking the combined teaching of Moronaga in view of Mizawa as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Moronaga by having the controller to automatically transferring the images stored in the intermediate memory to the long-term image memory upon detecting that the intermediate memory is full and upon detecting the presence of the long-term memory. The motivation to do so would have been to free space in the intermediate memory to allow the camera to capture more images to be stored in said intermediate memory as suggested by Mizawa (See col.4, line 4, lines 12-36).

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6. **Claims 6 and 9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Moronaga, US Patent 5,956,084 in view of Misawa, US Patent 6,208,380 B1 and further in view of Nihei, US Patent 6,195,513 B1.

Regarding claim 6, the combined teaching of Moronaga in view of Mizawa does not teach that the intermediate memory automatically overwrites one or more of said digital images in said intermediate memory with a subsequently acquired digital image.

However, Nihei teaches a camera (Fig. 1) comprising an internal memory (Fig. 6: 64) wherein said memory stores the image files in a First-In First-Out (FIFO) arrangement (Fig. 6: 73) so the oldest image stored in memory will be override so as to free space to store one new image (Col. 12, line 55 – col. 13, line 7).

Therefore, the combined teaching of Moronaga in view of Mizawa and further in view of Nihei as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the camera by having a memory with a First-In First-Out (FIFO) arrangement to store the recently captured images in the internal memory while transferring the oldest captured images in the long term image memory. The motivation to do so would have been to help the digital camera to use the memory capacity of the internal memory effectively by reading the image data from the memory every time a new image is captured as suggested by Nihei (Col. 12, line 55 – col. 13, line 7).

Regarding claim 9, the combined teaching of Moronaga in view of Mizawa and further in view of Nihei teaches the same as in claim 6. Therefore, grounds for rejecting claim 6 apply here.

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7. **Claims 8 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Moronaga, US Patent 5,956,084 in view of Misawa, US Patent 6,208,380 B1 and further in view of Bosh, US Patent 6,424,581 B1.

Regarding claim 8, the combined teaching of Moronaga in view of Mizawa teaches that the controller automatically stores said digital images into said long-term image memory (See Moronaga, col. 12, line 57- col. 13, line 22). Moronaga does not explicitly disclose that the controller is responsive to detecting an erasable type of said long-term image memory.

However, Bosh teaches detection of whether a memory is an erasable type (Rewriteable) or non-erasable (Write-one memory) for an information system (i.e. digital camera) (Col. 4, lines 34-67; see also col. 1, line 61 – col. 2, line 10).

Therefore, taking the combined teaching of Moronaga in view of Mizawa and further in view of Bosh as a whole, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the camera by having a detecting function for detecting whether a memory is an erasable type (Rewritable) or non-erasable (Write-one memory). The motivation to do so would help the digital camera to configure prior to transferring data from the internal memory to the external so as to avoid any problem when trying to recover the images from the long-term memory.

Regarding claim 17, the combined teaching of Moronaga in view of Mizawa and further in view of Bosh teaches the same as in claim 8. Therefore, grounds for rejecting claim 8 apply here.

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Conclusion

8. Because a new ground for rejection is being applied to claims amended without introducing new matter, this Office Action will be Non-Final.

Contact

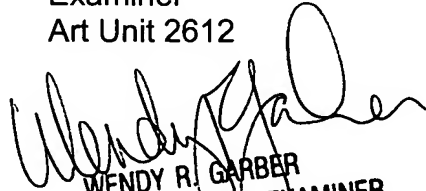
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nelson D. Hernandez whose telephone number is (703) 305-8717. The examiner can normally be reached on 8:30 A.M. to 6:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy R. Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NDHH
June 15, 2005

Nelson D. Hernandez
Examiner
Art Unit 2612


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